***In the Specification***

Please replace the paragraph beginning at page 3, line 27 and ending at page 4, line 1, of the specification, with the following paragraph:

In addition, during ART procedures special attention is paid to the issue of matching between oocytes, sperms and patient or embryos and patient. Even a minor mistake could lead to a personal disaster for the future parents. Only recently, an IVF mix-up occurred where black twins were born to a white couple (~~http://~~news.bbc.co.uk/1/hi/health/211552.stm).

Please replace the paragraph beginning at page 29, line 25 and ending at page 30, line 2, of the specification, with the following paragraph:

The dishes were placed in the incubator (ThermoForma 3110, Ohio, USA) at 37°C, 5% $CO_2$ and 95% humidity, equipped with the optical monitoring system of the present invention (an ~~EmbryoGuard~~™ EMBRYOGUARD™ unit). One control group consisting of 20 embryos in 20µl drops under mineral oil was placed in the same incubator on another shelf (control 1) and the second control dish (control 2) was placed in another incubator (within which there was no monitoring system of the present invention) with the exact same environmental condition.

Please replace the paragraph beginning at page 30, line 3 and ending at page 30, line 6, of the specification, with the following paragraph:

The embryo development was evaluated every 24 hours manually. The dishes placed in the ~~EmbryoGuard~~™ EMBRYOGUARD™ unit, were rotated and pictures were taken. The temperature condition was recorded using a data logger (ALMEMO 2290-4, Germany) connected to a PC.

Please replace the paragraph beginning at page 30, line 17 and ending at page 31, line 14, of the specification, with the following paragraph:

The cleavage rate of 2PN embryo in the ~~EmbryoGuard~~™ EMBRYOGUARD™ 24 hours after fertilization was 82% (115/140), control group 1 was 84% (136/162), control group 2 was 90% (197/220), and the group which tested the toxicity of the stickers was 86% (120/140). The balstocysts formation on the fifth day after fertilization was 45% (52/115), 49% (67/136), 54% (106/197) and 58% (70/120), respectively. Table 1 presents the results of the embryo development in this experiment:

TABLE 1

| Treatment | Total 2PN | Cleavage rate ±S.E (N) | Blastocyst ±S.E |
|---|---|---|---|
| ~~EmbryoGuard~~™ EMBRYOGUARD™ | 140 | 82% ± 3.2 (115) | 45% ± 4.6 (52) |
| *Control 1 | 162 | 84% ± 2.8 (136) | 49% ± 4.2 (67) |
| **Control 2 | 220 | 90% ± 2.0 (197) | 54% ± 3.5 (106) |
| Sticker | 140 | 86% ± 2.9 (120) | 58% ± 4.5 (70) |

Here, indexes *, ** and *** refer to the following:

*Using the same incubator within the ~~EmbryoGuard~~™ EMBRYOGUARD™ on another shelf;

**Using another incubator with the exact same environmental condition as that of the ~~EmbryoGuard~~™ EMBRYOGUARD™;

***Blastocyte rate out of cleaving embryos.

Please replace the paragraph beginning at page 31, line 15 and ending at page 32, line 13, of the specification, with the following paragraph:

**Fig. 10** compares the results obtained for control 1 and control 2 groups. Analysis of these results have shown that there were no significant differences ($P<0.05$) between the control groups throughout the entire embryonic development. This confirms that the environmental conditions in the incubator with ~~EmbryoGuard™~~ EMBRYOGUARD™ unit where not disturbed. **Fig. 11** compares control 1 group to the ~~EmbryoGuard™~~ EMBRYOGUARD™ group. This comparison shows that the embryos continued to develop to the blastocyst stage, with no significant differences. **Fig. 12** compares control 2 group to the sticker group. The sticker group consistently did not show lower development than control group 2, which incubated in the same incubator. Hence, neither the illumination nor any source of light radiation affects the embryos growth. A suitable incubation environment was maintained while the ~~EmbryoGuard™~~ EMBRYOGUARD™ operated within the incubator. There was no significant temperature fluctuation and the gas circulation was not impaired, as shown in **Fig. 13**. The fact that the stainless steel plate rotated during the automatic evaluation process, did not affect the embryos. The labels (glue and ink) were also not found to have a toxic affect on the embryos (as presented in the above Table 1).